

Appl. No. : 09/972,105
Filed : October 4, 2001

LISTING OF THE CLAIMS

1. (Cancelled)

2. (Previously presented) A method of isolating embryonic or fetal red blood cells from a sample containing maternal blood cells and embryonic or fetal blood cells or both, the method comprising determining which cell or cells contain or express an adult liver component that is a cell surface exposed component, wherein the adult liver component is not transferrin receptor, the method comprising the steps of:

(a) contacting the sample with a binding moiety that specifically binds the adult liver component;

(b) allowing the binding moiety to bind to the adult liver component; and

(c) isolating the embryonic or fetal red blood cells by virtue of being bound to the binding moiety.

3. (Previously presented) A method according to Claim 2 wherein the sample is a sample of blood from a pregnant female.

4. (Original) A method according to Claim 3 wherein the pregnant female is a human female and the sample is taken in the first trimester.

5. (Previously presented) A method according to Claim 2 wherein the embryonic or fetal red blood cell is of the nucleated megaloblastic series.

6. (Previously presented) A method according to Claim 2 wherein the adult liver component is protein.

7. (Previously presented) A method according to Claim 2 wherein the adult liver component is present, when compared to embryonic or fetal red blood cells, at less than 1 percent on a per-cell basis in maternal cells of the maternal blood.

8. (Cancelled)

9. (Previously presented) A method of isolating embryonic or fetal red blood cells from a sample containing maternal blood cells and embryonic or fetal blood cells or both, the method comprising isolating the cells which contain or express a component selected from the group consisting of glucose transporter 2 (GLUT2), a P-glycoprotein, a multi-drug resistance protein (MDRP), a multi-drug resistance-like protein (MRP), γ -glutamyl transpeptidase, a lipoprotein receptor, an alkaline phosphatase, a bile salt transporter, a hormone receptor, a

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multiple organic ion transporter (MOAT), a bilirubin transporter, and a bilirubin conjugate transporter, the method comprising the steps of:

(a) contacting the sample with a binding moiety that specifically binds the component;

(b) allowing the binding moiety to bind to the adult liver component; and

(c) isolating the embryonic or fetal red blood cells by virtue of being bound to the binding moiety.

10. (Cancelled)

11. (Cancelled)

12. (Previously presented) A method according to Claim 2 or 9 wherein the binding moiety is an antibody or fragment or derivative thereof.

13. (Original) A method of isolating embryonic or fetal red blood cells from a sample according to Claim 12 wherein the binding moiety is immobilized to a solid support.

14. (Previously presented) A method according to Claim 2 or 9 wherein the binding moiety is detectably labeled or is capable of detection.

15. (Previously presented) A method of isolating embryonic or fetal blood cells from a sample according to Claim 14 wherein the label facilitates isolation of the cells.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)